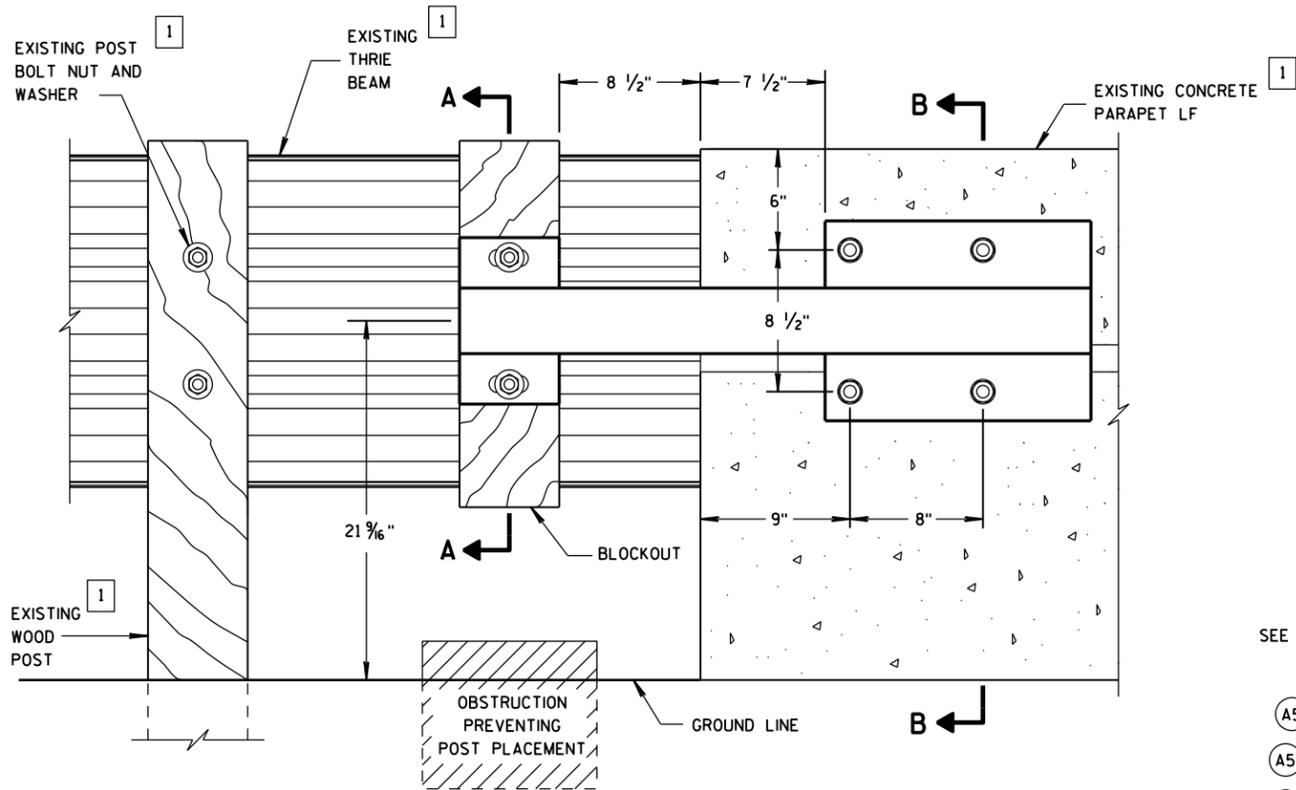
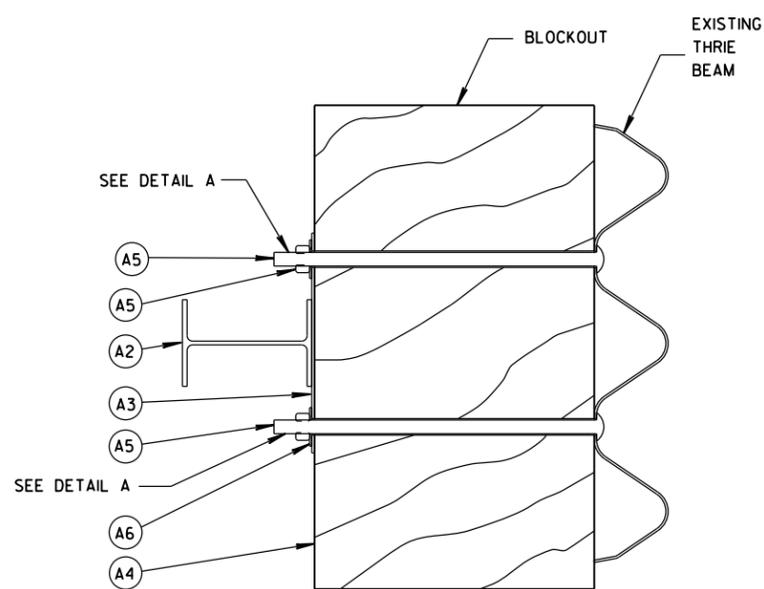




# SDD 14B48-a Retrofit Cantilever Blunt End - Elevation, Section details, Installation and Bill of Materials



**ELEVATION VIEW (BACKSIDE OF PARAPET)**



**SECTION A-A**

NOTES: THRIE BEAM CONNECTION HARDWARE OMITTED FROM VIEWS FOR CLARITY

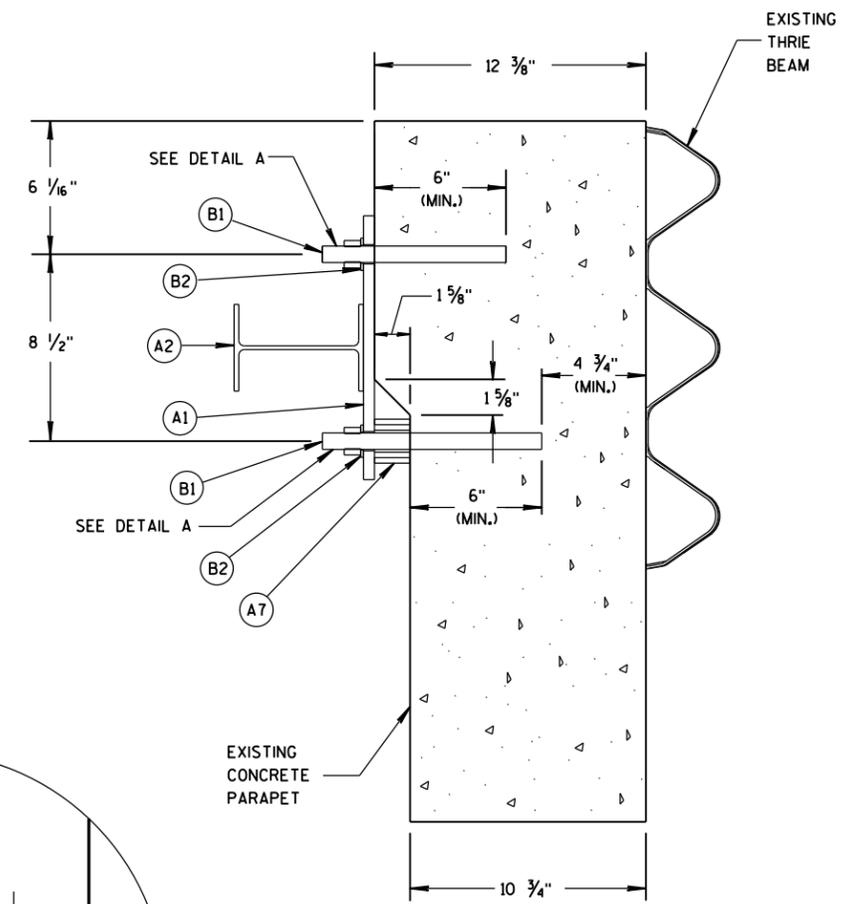
## GENERAL NOTES

THE ADHESIVE USED TO SECURE THREADED RODS MUST HAVE MINIMUM BOND STRENGTHS OF 1800 PSI FOR EMBEDMENT SHOWN.

ANY EXISTING THROUGH-BOLT INTERFERING WITH THE PLACEMENT OF THIS COMPONENT SHALL BE REPLACED WITH A SHORTER EPOXED BOLT.

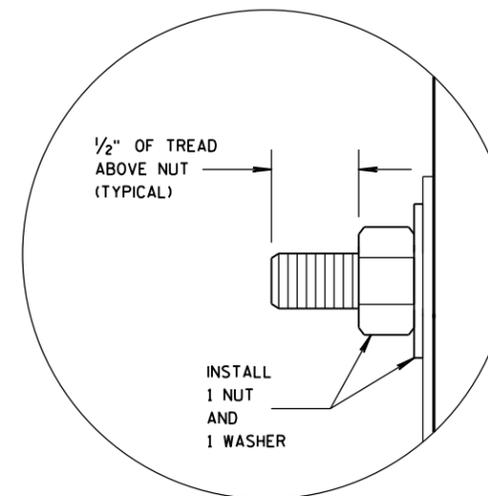
1 SEE OTHER PARTS OF THE PLAN OR STANDARD SPECIFICATIONS.

2 TYPICAL BRIDGE PARAPET SHOWN. FOR OTHER RIGID BARRIERS WITH VERTICAL BACK OMIT PART (A7).



**SECTION B-B**

NOTES: THRIE BEAM CONNECTION HARDWARE OMITTED FROM VIEWS FOR CLARITY.

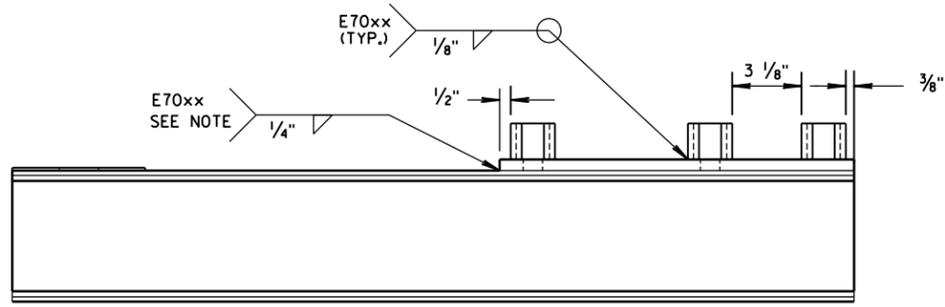


**DETAIL A**

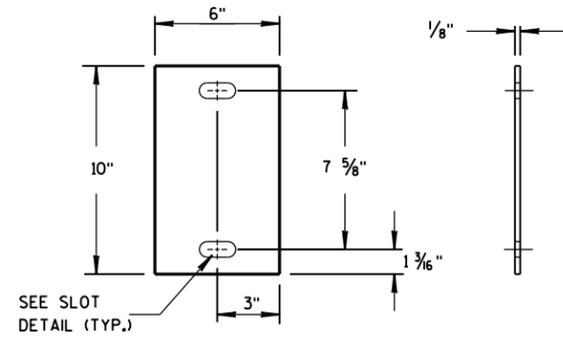
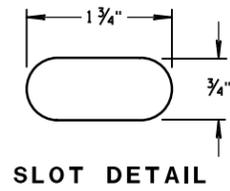
CONCRETE PARAPET LF RETROFIT BILL OF MATERIALS				
ITEM NO.	QTY.	DESCRIPTION	MATERIAL SPECIFICATION	COMMENTS
(A1)	1	16" x 12" x 1/2" BASE PLATE	ASTM A572 GR. 50	-
(A2)	1	38" LONG W6x9 BEAM	ASTM A992 GR. 50	-
(A3)	1	6" x 10" x 1/8" BACKUP PLATE	ASTM A36	-
(A4)	1	6" x 12 3/4" x 22" BLOCKOUT	1	-
(A5)	2	5/8" DIA. POST BOLT AND DOUBLE RECESSED (DR) HEAVY HEX NUT	1	-
(A6)	2	5/8" DIA. FLAT WASHER	GRADE 5	-
(A7)	3	2" x 2" x 1/4" SQUARE TUBE 1 5/8" LONG	ASTM A36	MULTIPLE 3/4" DIA. FLAT WASHERS (B2) CAN BE USED
(B1)	4	3/4" DIA. - 10 UNC THREADED ROD	ASTM A193 TYPE B7	-
(B2)	4	3/4" DIA. FLAT WASHER	ASTM F436	-
(B3)	4	3/4" DIA. DOUBLE RECESSED (DR) HEAVY HEX NUT	1	-

**RETROFIT CANTILEVER BLUNT END**

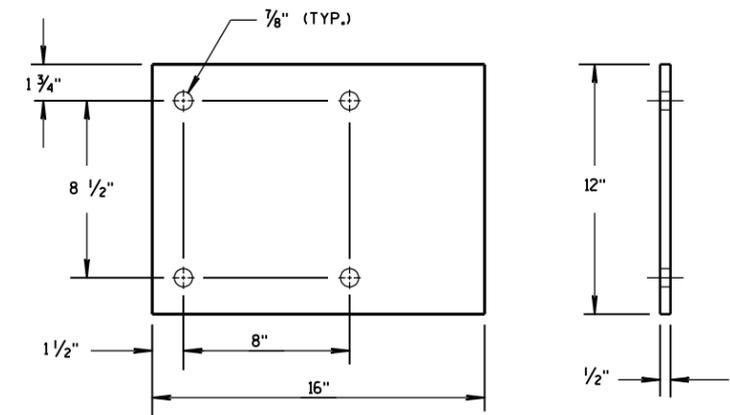
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



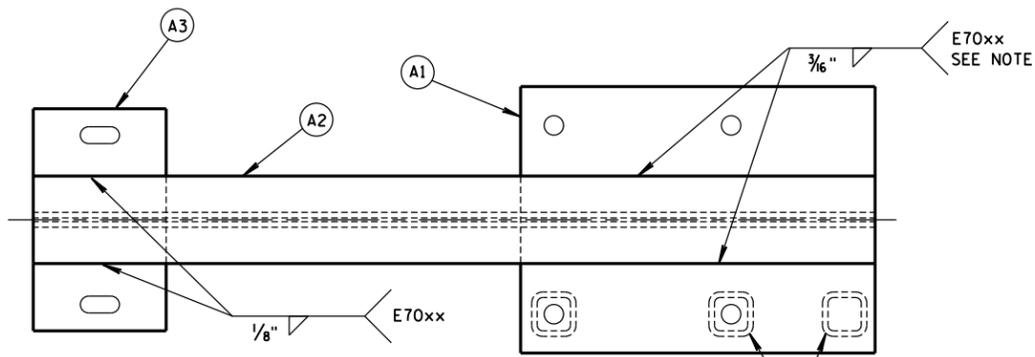
PLAN VIEW



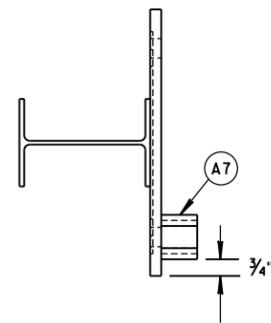
BLACKUP PLATE (A3)



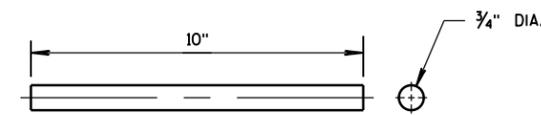
BASE PLATE (A1)



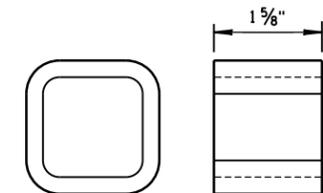
ELEVATION VIEW



END VIEW



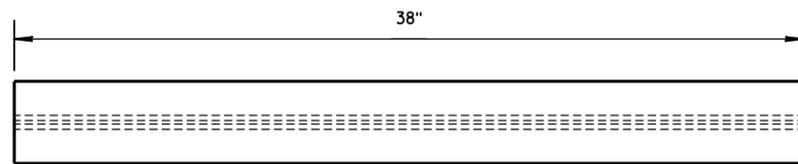
THREADED ROD (B1)



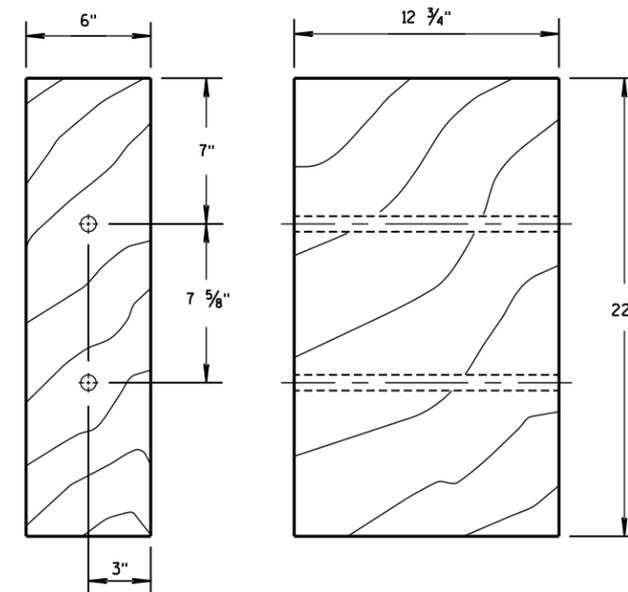
SQUARE TUBE (A7)

NOTES:  
WELDS ON OPPOSITE PLANES (i.e., VERTICAL AND LONGITUDINAL) SHALL NOT BE CONNECTED.

WELD DETAIL



W6x9 BEAM (A2)



BLOCKOUT (A4)

ANCHOR PLATE ASSEMBLY PARTS

RETROFIT CANTILEVER BLUNT END	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE FHWA	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

6

S.D.D. 14 B 48-1b

S.D.D. 14 B 48-1b

Retrofit Cantilever Blunt End

References:

- [Standard Spec 614](#)
- [FDM 11-45-30](#)
- TRP 03-266-12

Bid items associated with this drawing:

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
614.0212	Steel Thrie Beam Structure Approach Retrofit Cantilever Blunt End .....	EACH

Standardized Special Provisions associated with this drawing:

<u>STSP NUMBER</u>	<u>TITLE</u>
NONE	

Other SDDs associated with this drawing:

- [SDD 14B20](#) Steel Thrie Beam Structure Approach

Design Notes:

Use this retrofit alternative on 3R projects with an existing Class A thrie beam transition that is missing the first post upstream of a blunt end bridge parapet and it is not possible to install a new post. A flume, wing wall, shallow pipe or other object can prevent installing a post.

Prior to using this alternative, review if installing a new thrie beam transition or removing the obstruction is feasible. Document this review in the DSR. Review [FDM 11-45-30.5](#) and [FDM 11-45 Attachment 20.1](#) to determine if using the retrofit alternative is feasible. Type of work near thrie beam transition may influence what options are available.

Retrofit alternative is not for new installations of thrie beam transitions or new bridge parapets. These installations should be designed to accommodate all posts and proper grading of the thrie beam transition

Do not use this retrofit alternative in combination with other retrofits or thrie beam deficiencies. If other deficiencies can be repaired, (e.g. torn thrie beam rail or busted post is repaired...) then it is acceptable to use retrofit alternative. If a significant amount of repair is required, installing a new transition may be the best choice

Review parapet for adequate thickness, embedment depth, cover, and condition. If these are not reviewed, installing retrofit alternative may damage or increase the damage to and existing parapet.

Contact Person:

Erik Emerson (608) 266-2842